

ABSTRACT OF THE DISCLOSURE

An ATM header conversion circuit for realizing bidirectional header conversion through the use of a simple arrangement using only one entry data storage device. The entry data storage device stores bidirectional header data in a state associated with each of a plurality of addresses. The ATM header conversion circuit partially collates inputted header data with one of entry data groups placed in the entry data storage device on the basis of mask bits which designate the collation bit positions of the inputted header data, and outputs, as new header data, the header data of the other entry data group at the addresses where the partial collation shows coincidence.